
National Patient Information Reporting System: National Data Warehouse

NDW Export Tracking Data Mart

User Guide

Version 1.0

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Version Control

Version	Date	Notes
1.0	April 2008	Initial version. FY08 Bridge Contract deliverable, D1.9.3 Approved May 13, 2008.

Introduction

At the sending site, the source system creates a data export file of patient registrations and encounters, and sends the file to the IHS National Data Warehouse (NDW), where the data is loaded into the NDW database.

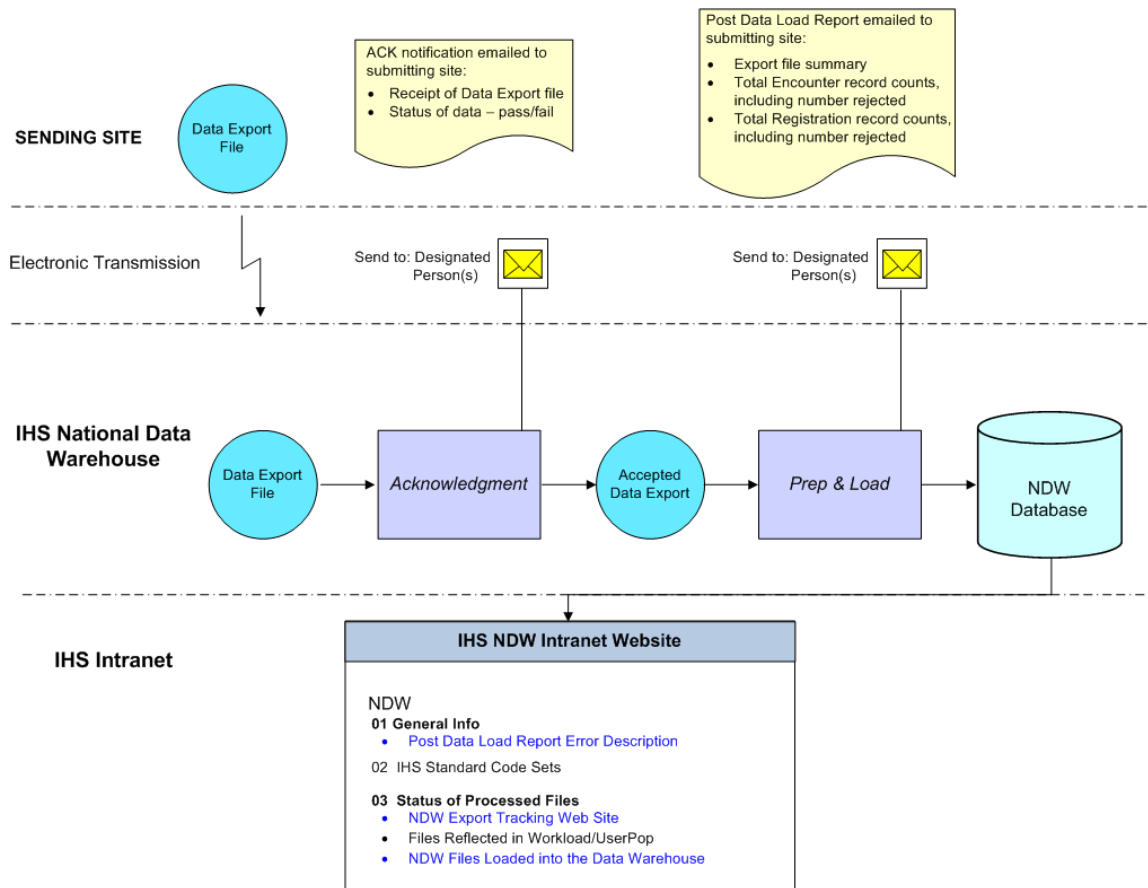


Figure 1. Data Export Process Flow

As the figure illustrates,

- When the data export file arrives in the NDW receiving area, it is checked to make sure the data transmission was successful. In the event of a file transmission failure (if the NDW is aware a failure occurred - at least a portion of the transmission must have reached the NDW for the NDW to be aware) , NDW staff will alert the sending site by email. For more information, see the next section, “Why Data Export File Transmissions Fail.”

-
- The successfully transmitted file then goes through the Acknowledgement process (or ACK process) and an automated notification is emailed to designated Area/site staff.
 - Next, the exported data is prepared for loading into the NDW database. After the data is loaded into the database, an automated post-load report is emailed to the designated Area/site staff.
 - In addition to the two email notifications, information related to data export files is available at the IHS NDW Intranet web site, which is updated daily. Currently, the types of data export files that can be tracked via this web site include
 - RPMS and Non-RPMS HL7
 - Structured File Format (SFF)
 - Fiscal Intermediary (FI)
 - Contract Health Services ACHS and CHSSTAT

Why Data Export File Transmissions Fail

There are two general error categories related to data export file transmission failure:

- Transmission related, such as an empty (zero bytes) file, or a file with no header and/or no trailer, or data corruption that occurred during transmission. NPIRS staff will address such errors via email.
- Source system related, such as no delimiters, or no header or trailer record in the file. Again, NPIRS staff will respond via email if such errors are found. When file failures are related to the source system, Cimarron is the support contact.

NDW Automated Data Export Status Email Notifications

The NDW generates two reports related to the status of the data export file:

- Data Transmission Log Report, or Acknowledgement Notification
- Post-Load Report

The NDW emails each of these reports automatically to the designated person(s) at the sending site.

About the NDW Email Notification List

While the NPIRS staff is responsible for the administration of this list, the currency of the list is the responsibility of the sending sites. To send updates to this list (additions, deletions), please send an email to

NDW-ACKREPLY@ihs.gov

Include the following information:

- Sending Site name and Facility ID
- Full name of the person to receive the NDW email notifications
- Email address
- Phone Number

NDW Acknowledgement Notification Email

When the data export file arrives in the NDW, the file is check to make sure it is complete and readable. If it is, an automatic notification, titled “NDW Data Transmission Log Report,” is emailed to the sending site. For example, this is an example of an Acknowledgement notification for a successful file transmission:

```

* DATA WAREHOUSE *
NDW Data Transmission Log Report
Data Received Date: Mar 25, 2008

For more information please send an email to: NDW-ACKREPLY@ihs.gov

Export ID: 10113
Export file name: 663510308032408413.BDW
Static ASUFAC of exporting box: 663510
Beginning Date: Feb 26, 2008
Ending Date: Mar 23, 2008
Received by IE Date: Mar 24, 2008
Run Location: GREENVILLE RANCHERIA TRB HLTH
Transmission Status: No errors detected
Total Number of Registrations Received: 420
Total Number of Encounters Received: 1837
```

Figure 2. Acknowledgement notification example of a successful data file transmission

Also referred to as the “ACK,” this report provides the following information on the data export file:

Report Item	Description
Data Received Date	The date the ACK received the data export file.
Export ID	The unique ID assigned by the NDW to this file.
Export file name	The file name assigned to the data export by the source system.
Static ASUFAC of exporting box	The 6-character code that identifies the site that sent the file.
Beginning Date	The Date Last Modified begin date for this data export. Note: this date is determined by the default delay settings at the source data site.
Ending Date	This date represents the Date Last Modified ending date for this data export.
Received by IE Date	The date the NDW Integration Engine received the file, where the file is checked initially to make sure there are no errors serious enough to prevent the file from going on to the Acknowledgement process.
Run Location	The name of the site that sent the file.
Transmission Status	No errors detected (pass), or Errors detected in file (fail). A failure status can be <ul style="list-style-type: none">• Record count discrepancy of 10 or more records• No records found in file• File was previously loaded• Area Code associated with the site cannot be determined• Too many sub-records of a specific type in a record. Note: NPIRS staff will contact the Site/Area for any failure other than “no records” or “previously loaded.”
Total Number of Registration Records Received	The number of Registration records counted by the ACK process.
Total Number of Encounter Records Received	The number of Encounter records counted by the ACK process.

If the Transmission Status is “Errors detected in file”

A Transmission Status of “Errors detected in file” indicates that the file failed. The reason for the failure is specified at the end of the notification. NPIRS staff will contact the Site/Area for any failure other than “no records” or “previously loaded.”

The following figure displays an example of an Acknowledgement notification for a file transmission that failed. In this case, the file transmission failed because of a discrepancy between the encounters total in the file’s trailer record and the total number of encounters received/counted by the NDW.

```

      * DATA WAREHOUSE *
      NDW Data Transmission Log Report
      Data Received Date: Mar 25, 2008

For more information please send an email to: NDW-ACKREPLY@ihs.gov

      Export ID: 10111
      Export file name: 5562013080321235127.BDW
      Static ASUFAC of exporting box: 556201
      Beginning Date: Mar 08, 2008
      Ending Date: Mar 14, 2008
      Received by IE Date: Mar 24, 2008
      Run Location: CARL ALBERT HOSP
      Transmission Status: Errors detected in file
      Total Number of Registrations Received: 1814
      Total Number of Encounters Received: 12468

Discrepancy Noted: SENDER ENCTR COUNT EXCEEDS NDW COUNT BY > 10, FILE
REJECTED

Actual P000 count: 12468   Trailer PCC Enctr Qty : 12765

This file has been rejected because of a large difference between the
record count in the trailer record from your system and the physical
count of records the NDW received.  Because it could point to something
seriously wrong with the settings at the Site, we will review this
situation, contact the appropriate parties, and seek a resolution.

Discrepancy Noted: SENDER REG+ENCTR COUNT EXCEEDS NDW COUNT BY > 10,
FILE REJECTED

Actual rec count : 14284   Trailer Src Fl Rec Qty : 14581
```

Figure 3. Acknowledgement notification example of a failed data file transmission

What to do if you don't get a timely acknowledgement

The person designated as the recipient of the automated NDW Acknowledgement notification should receive an ACK email within 24 hours (during a normal work week) of the data export file transmittal. If an ACK email does not arrive within the expected time, the site contact should check the status of the data export file by sending an email inquiry to:

NDW-ACKREPLY@ihs.gov

When sending the email inquiry, include the site facility code, the export date, and the file name (if known).

NDW Post Load Report Email

After the export data has been loaded into the NDW database, a Post-Load report, titled “Post Data Load Report,” is generated and emailed automatically to the designated person(s) at the sending site. For example:

IHS NATIONAL DATA WAREHOUSE				
NDW Post Data Load Report				
Load Date: 03/25/2008				
For more information please send an email to: NDW-ACKREPLY@ihs.gov				
Export ID: 10113				
Export File Name: 663510308032408413.BDW				
Static ASUFAC of exporting box: 663510				
Beginning Date: 02/26/2008				
Ending Date: 03/23/2008				
Run Location: GREENVILLE RANCHERIA TRB HLTH				
Load Status: Exceptions Detected				
Total Number of Encounters Received: 1837				
Total Number of Registrations Received: 420				
Encounters:	Add	Change	Delete	Rejected
1672		159	4	2
Registrations:	Add	Change	Delete	Rejected
96		324	0	0
Error Description	Field Name			Count
*** REJECTED RECORDS ***				
REG FOR ENCTR NOT ON FILE	n/a			2
*** TRANSFORMATIONS ***				
INVALID DATE, STORED AS DATE CHAR FORMAT	Date Moved To Community (character format)			62
INVALID DATE, STORED AS DATE CHAR FORMAT	Eligibility Start Date (character format)			1
INVALID DATE, STORED AS DATE CHAR FORMAT	Last Menstrual Period (character format)			3

Figure 4. NDW Post Data Load Report example

The information in this report should match the Acknowledgement report information for the *same* data export file, with the following additions:

Report Item	Description
Load Date	The date that the data was loaded into the NDW database. The actual load date may vary, depending on scheduling.
Load Status	No exceptions or Exceptions Detected. Exceptions can be rejected records or transformations, and both types are listed at the end of the report.
Encounters	The counts of records flagged as added, changed, deleted and rejected. Rejected records are those encounters that were rejected by the NDW during the Prep & Load processes. The sum of added, changed, deleted, and rejected counts should equal the Total Number of Encounter Records Received.
Registrations	The counts of records flagged as added, changed, deleted and rejected. Rejected records are those registrations that were rejected by the NDW during the Prep & Load processes. The sum of added, changed, deleted, and rejected counts should equal the Total Number of Registration Records Received.
Error Description, Field Name, Count	Any rejected records and/or transformation errors are listed in this section.

Using the NDW Post Data Load Report and the Export Tracking web site, available via the IHS National Data Warehouse intranet, you can locate specific encounter and registration codes for rejected records.

For more information related to transformation errors, see the *Post Data Load Report Error Descriptions* PDF document, which is available at the IHS National Data Warehouse intranet.

Using the IHS National Data Warehouse Web Site

The IHS National Data Warehouse web site, which provides access to the NDW Export Tracking web site, is available to those who have access to the IHS Intranet.

Logging on to the NDW Web Site

A logon account is not required to view Export Tracking information. However, if you have a NDW intranet account, you may use it to log on to the web site.

To log on to the NDW web site,

1. Go to the following intranet web site:

<http://rohan.d1.na.ihs.gov/businessobjects/enterprise11/InfoView/main.aspx>

The Log On to BusinessObjects web page is displayed.

2. Click the **Guest Logon** button, located on the right panel of the web page.

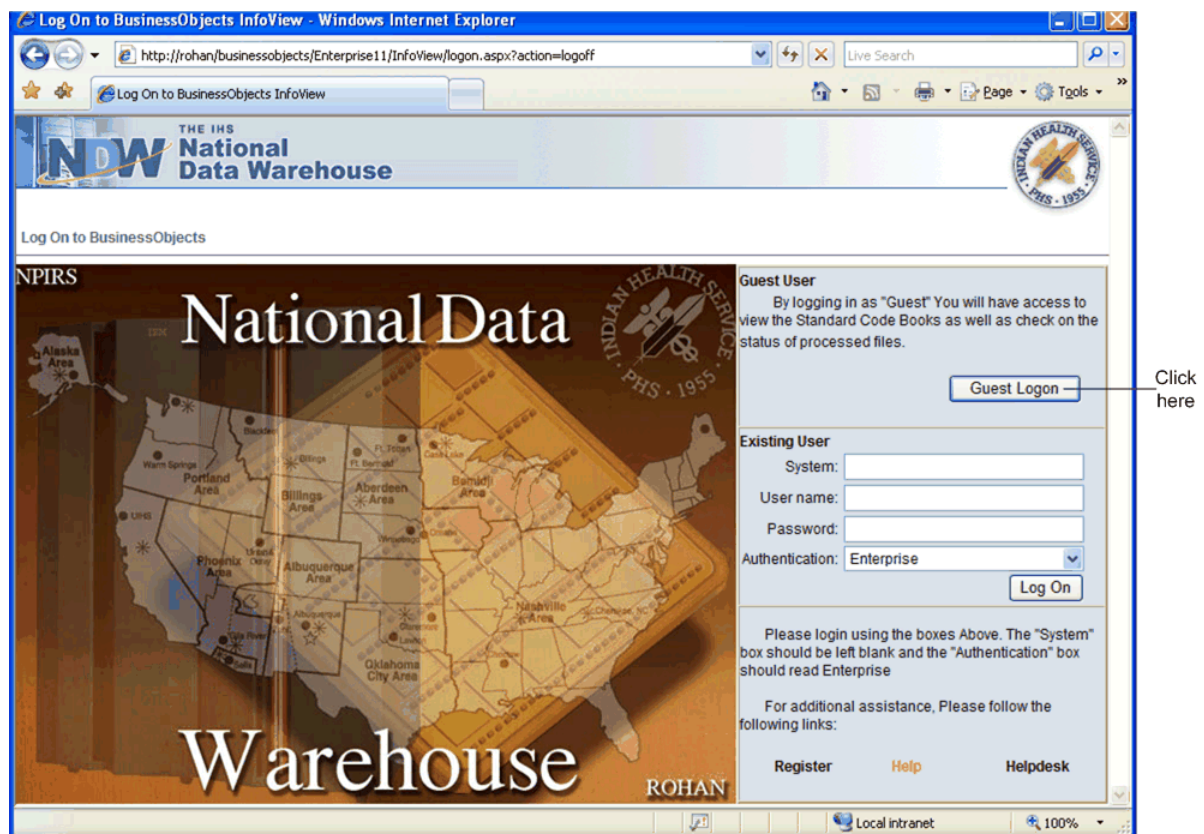


Figure 5. IHS National Data Warehouse intranet Log On web page

Navigating the Web Site

The IHS National Data Warehouse intranet web page is divided into two panels: the Folders (left) panel and the Details or folder contents (right) panel.

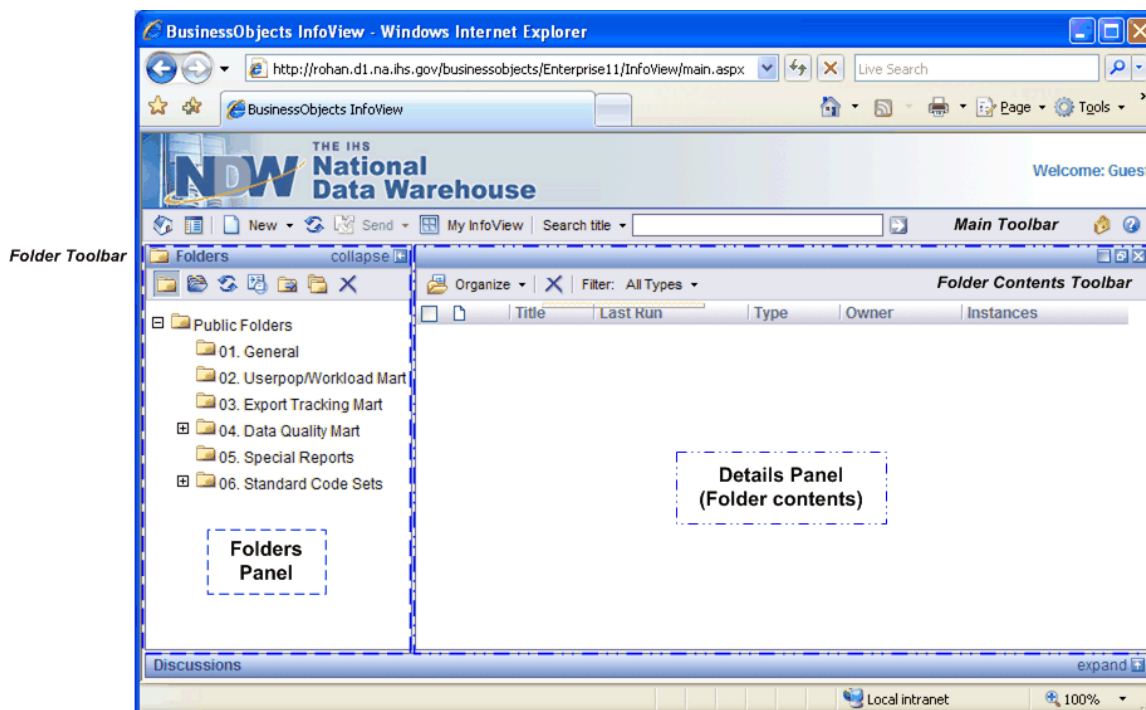







Figure 6. Layout of the IHS National Data Warehouse web page

The **Folders** panel contains a navigation tree of folders and sub-folders. The **Details** panel displays the contents of a folder or sub-folder. The contents, which are referred to as objects, may include reports, documents (.pdf, .doc, .xls), and/or links to other web sites.

The following table describes some navigational tools you may find useful.

Click	Location	To . . .
	Main toolbar	Toggle between hiding/displaying the Folders panel.
	Right corner, above the Folder Contents toolbar	Maximize the display area of the Details panel (hide the Folder toolbar).

Click	Location	To . . .
	Right corner, above the Folder Contents toolbar	Restore the original display of Details panel and Folders panel
Any 	Folder tree	Display the contents (if any) in the folder.
	Main toolbar	Log off and return to the Log On to BusinessObjects web page.

Locating Export Tracking Information

To locate the Export Tracking information,

1. In the Folders panel, expand the **Public Folders** to display the folder tree.
2. Click the **03. Export Tracking Mart** folder to display its contents in the Details panel.

For example:

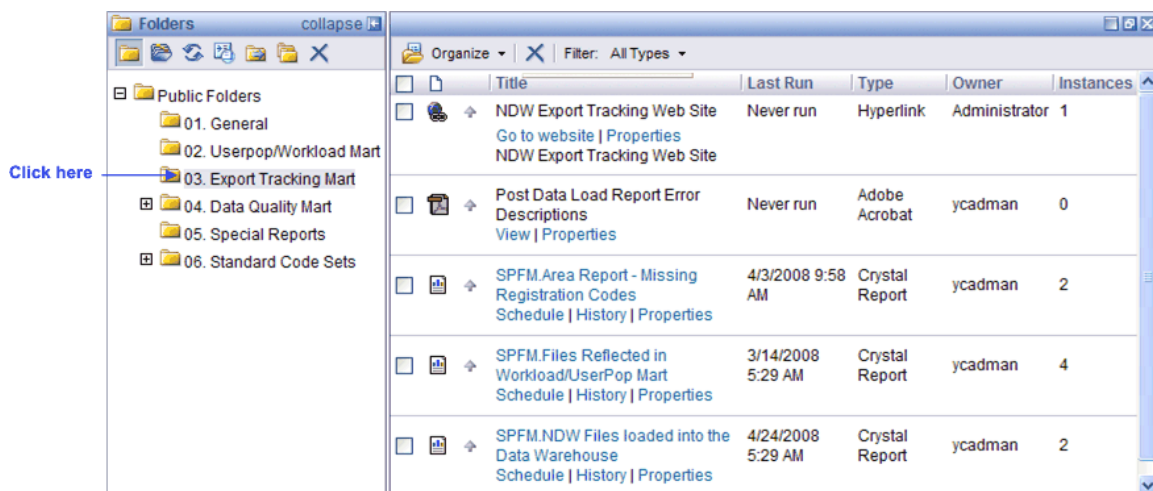


Figure 7. Location of Export Tracking information on the NDW web site

Getting a Copy of Post Data Load Report Error Descriptions

The bottom of the Post Data Load Report includes any error messages (Error Description), the Field Name to which the error applies, and the number of times the error occurred (Count). These error messages, along with descriptions of how/why the error occurred and actions to take to correct the error, are contained in the *Post Data Load Report Error Descriptions* PDF document.

To display, print, and/or save a copy of the error descriptions,

1. In the Details panel of the Export Tracking Mart folder, locate the **Post Data Load Report Error Descriptions** and click **View** to display the document. For example:

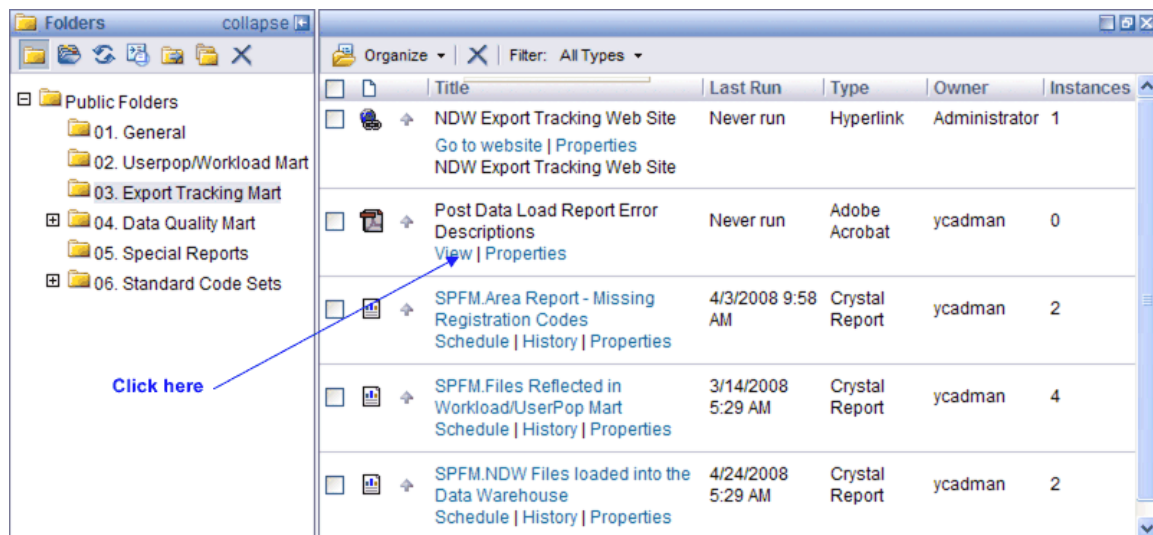


Figure 8. Location of error descriptions document

The Details panel displays the document in an Adobe viewer.

2. Using Adobe options, save the PDF file to your local drive or print a hard copy.
3. To return to the Export Tracking details panel, click the browser's Back Arrow button or the 03. Export Tracking Mart folder.

Using the NDW Export Tracking Web Site

The Export Tracking web site reports information related to your data export files.

Displaying the NDW Export Tracking Web Site

To display the NDW Export Tracking web site,

In the Details panel of the Export Tracking Mart folder, locate the **NDW Export Tracking Web Site** and click **Go to website**.

For example:

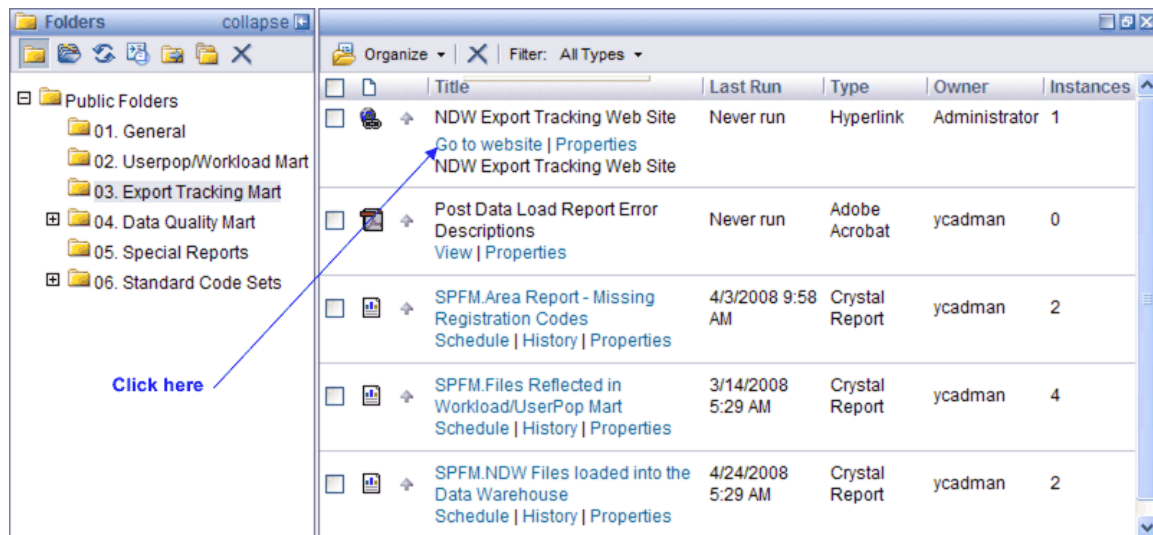


Figure 9. Displaying the NDW Export Tracking web site

The Details panel displays the NDW Export Tracking web site.

About the NDW Export Tracking Web Site

The NDW Export Tracking Web Site was designed to work in Microsoft's Windows® Internet Explorer®. If you use a different browser, you may need to click the “go” button to execute the search options. Based on a set of search parameters, the web page displays a report of one or more data export files.

The primary search option is the Area, then within an Area, a Site. Additionally, you can specify a “Received by IE Date range” and/or the Export ID assigned to a specific data export file.

This is the layout of the NDW Export Tracking web site:

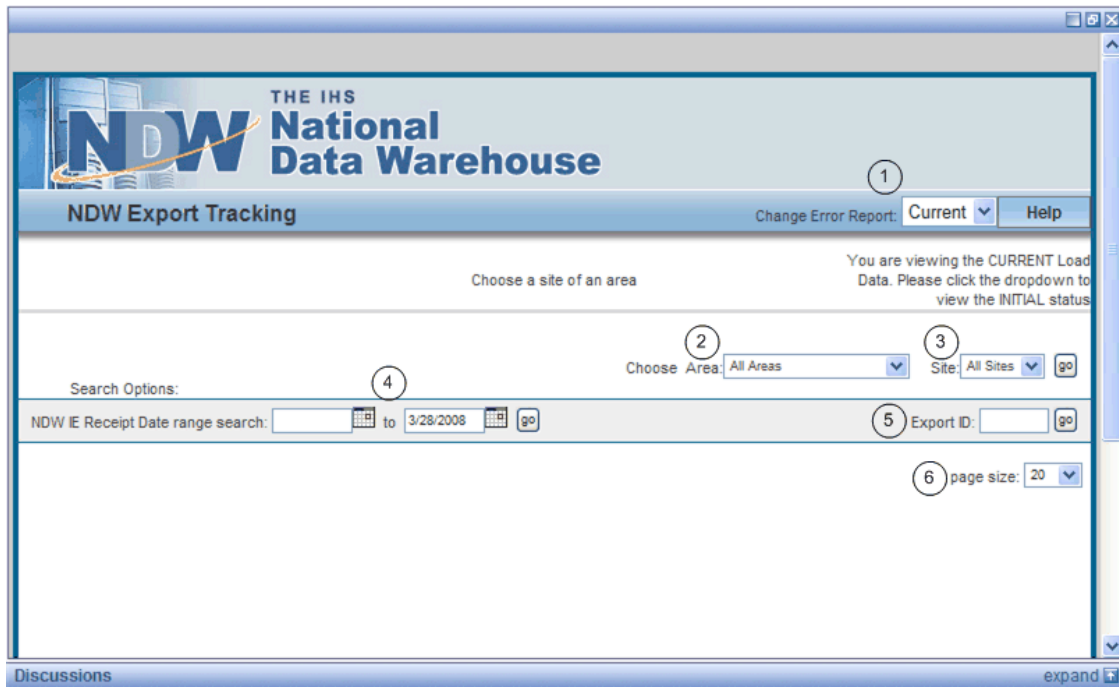


Figure 10. NDW Export Tracking web site

Item	Description
1	There are two Error Report view modes: Current (default) and Initial. Both view modes display all data export files received by the NDW and their statuses. The difference between the two modes is the Encounter Reject counts; where the count for a particular file will be lower in the Current view, if more recent files sent include corrections to that file's Encounter rejects.
2, 3	Use Choose Area to select and display the export data files for All Areas and All Sites (default) or a specific Area and All Sites or a specific Site. The Fiscal Intermediary option displays all the Fiscal Intermediary (FI) files received by the NDW. Use Site to restrict the search to All Sites or a specific Site within an Area. Note: All searches are based first on the Area/Site selections.
4	Use the NDW IE Receipt Date range to limit an Area/Site search to export data files within a specified date range. These dates are the "Received by IE Date" on the ACK and Post Load report emails. You can use the calendars to select the dates.

Item	Description
5	Use the NDW Export ID assigned to a specific data export file to display only that data export file's information. The Export ID is reported on the ACK and Post Load report emails. If specifying an Export ID, All Areas and All Sites search options must be selected and the date range must include the file's IE Receipt Date.
6	Use the page size to limit the number of export files displayed on a page, from 10 to 100 per page. The default is 20.

Viewing Data Export File Information

The following example displays the Current view of a list of export files received between March 24-25, 2008 from all Areas and sites.

Search Options: Choose Area: All Areas Site: All Sites go									
NDW Receipt Date range search: 03/24/2008 to 03/25/2008 go Export ID: go									
Results 1 - 9 for Exported Date Range 03/24/2008 - 03/25/2008 reset page size: 20									
Area	Export ID	ASUFAC	File Name	First/Last Mod Dates	Ack'd Loaded	Registration	Registration	Encounter	Encounter
						Total Reg	Curr Reg	Total Enctr	Curr Reg
NSA	10119	510000	chsstat510000a.08085	F- N/A L- N/A	A-03/25/2008 L-				
POR	10118	758410	SFE7584102008085.TXT	F- N/A L- N/A	A-03/25/2008 L-				
POR	10117	758410	7584103080325101047.BDW	F- 2/19/2008 L- 3/18/2008	A-03/25/2008 L-				
OKC	10116	556201	R 5562013080325113632.BDW	F- 3/1/2008 L- 3/7/2008	A-03/25/2008 L-				
POR	10115	757111	7571113080324134137.BDW	F- 2/25/2008 L- 3/23/2008	A-03/25/2008 L-03/25/2008	54		1769	
CAO	10114	663610	6636103080324173118.BDW	F- 2/26/2008 L- 3/23/2008	A-03/25/2008 L-03/25/2008	108		6718	
CAO	10113	663510	663510308032408413.BDW	F- 2/26/2008 L- 3/23/2008	A-03/25/2008 L-03/25/2008	96		1672	2
NSA	10112	587353	5873533080323181522.BDW	F- 2/23/2008 L- 3/22/2008	A-03/25/2008 L-03/25/2008	7		700	
OKC	10111	556201	R 5562013080321235127.BDW	F- 3/8/2008 L- 3/14/2008	A-03/25/2008 L-				

Figure 11. NDW Export Tracker Data Export File information display

Item	Description
1	<p>Results message indicates the total number of files found within the Date Range search options.</p> <p>When the results equal more than the selected page size, page numbers are displayed at the bottom of the current display. To move from page to page, click the next page number at the bottom of the list.</p> <p>Note: clicking “reset” displays all files received from all Areas and all sites.</p>
2	The Area column displays the 3-character Area code from which the file was sent.
3	The Export ID displays the unique number assigned to the data export file by the NDW. This number appears on the ACK and Post-Load Report emails.
4	The ASUFAC column displays the 6-character numeric code of the site from which the file was sent, and labeled “Static ASUFAC of exporting box on the ACK and Post Data Load Report emails.
5	<p>The File Name is the name of the file sent from the Area/ASUFAC and labeled “Export File Name” on the ACK and Post Data Load Report emails.</p> <p>Note: Any File Name displayed in red font, preceded by a red-boxed R indicates that the file was rejected, and the ACK email for such a file specifies why the file was rejected.</p>
6	The First/Last Mod Dates column displays two dates; where the date preceded by F- is the Date Last Modified begin date, and the date preceded by L- is the Date Last Modified ending date for the listed data export file, when such dates are available. These dates correspond to the “Beginning Date” (F-) and the “Ending Date” (L-) specified on the ACK and Post Data Load Report emails.
7	The Ack’d Loaded column displays two dates; where the date preceded by A- is the Received by ACK date specified on the ACK email, and the date preceded by L- is the Load Date specified on the Post Data Load Report email, for the listed data export file.
8	<p>The Registration column displays the total Registration counts and Current Rejects for the listed data export file.</p> <p>The Total Reg count corresponds to the “Total Number of Registrations/Registration Records Received” count on the ACK and Post Data Load Report emails.</p> <p>The Curr Rej count (if any) corresponds to the “Registrations: Rejected” count on the Post Data Load Report email.</p>

Item	Description
9	<p>The Encounter column displays the total Encounter counts and Current Rejects for the listed data export file</p> <p>The Total Enctr count corresponds to the “Total Number of Encounters/ Encounter Records Received” count on the ACK and Post Data Load Report emails</p> <p>The Curr Rej count (if any) corresponds to the “Encounters: Rejected” count on the Post Data Load Report email in the Initial view mode of that report. In the Current view mode, the count may be lower, reflecting corrections sent in subsequent data export files.</p>

Checking Rejected Records

To determine the reason for any rejected **Registration** or **Encounter** records, click on the number under the **Curr Rej** column of the listed data export.

NDW Export Tracking

Change Error Report: Current Help

GREENVILLE RANCHERIA TRB HLTH of CALIFORNIA

You are viewing the CURRENT Load Data. Please click the dropdown to view the INITIAL status

Search Options:

Choose Area: CALIFORNIA Site: GREENVILLE RANCHERIA TRB HLTH go

NDW IE Receipt Date range search: 01/02/2008 to 03/31/2008 go Export ID: go

Results 1 - 6 for Exported Date Range 01/02/2008 - 03/31/2008 reset page size: 20

Area	Export ID	ASUFAC	File Name	First/Last Mod Dates	Ack'd Loaded	Registration		Encounter	
						Total Reg	Curr Rej	Total Enctr	Curr Rej
CAO	10148	663510	6635103080326191017.BDW	F- 3/24/2008 L- 3/25/2008	A-03/26/2008 L-03/27/2008	15		150	
CAO	10113	663510	663510308032408413.BDW	F- 2/26/2008 L- 3/23/2008	A-03/25/2008 L-03/25/2008	96		1672	2
CAO	9860	663510	6635103080226191014.BDW	F- 2/25/2008 L- 2/25/2008	A-02/26/2008 L-02/27/2008	9		89	
CAO	9828	663510	6635103080225083916.BDW	F- 1/29/2008 L- 2/24/2008	A-02/26/2008 L-02/26/2008	50		1531	
CAO	9473	663510	663510308012919102.BDW	F- 1/23/2008 L- 1/28/2008	A-01/29/2008 L-02/01/2008	12		243	
CAO	9428	663510	6635103080123085101.BDW	F- 12/29/2007 L- 1/22/2008	A-01/23/2008 L-02/01/2008	43		1190	

1

Click here

Figure 12. Displaying information related to rejected Registrations or Encounters

Record Rejection Example

The following example shows the results of clicking on the **Encounter Curr Rej** number, **2** for Export ID 10113.

The screenshot shows the 'NDW Export Tracking' application. At the top, there's a header with 'Change Error Report: Current' and a 'Help' button. Below this, the breadcrumb path is 'CALIFORNIA / GREENVILLE RANCHERIA TRB HLTH of CALIFORNIA'. A message states: 'You are viewing the CURRENT Load Data. Please click the dropdown to view the INITIAL status'. The main content area shows 'Results 1 - 2 unique records for Export ID 10113' with a 'page size: 20' dropdown. A table displays the rejection details:

Encounter Code	Registration Code	Reason
161910000255219	161910000000372	REG FOR ENCTR NOT ON FILE
161910000254969	161910000002141	REG FOR ENCTR NOT ON FILE

Below the table, the number '1' is displayed, likely indicating the current page or record count.

Figure 13. Example of Encounter record rejections details

Referencing the *Post Data Load Error Messages* PDF, the Reject error, REG FOR ENCTR NOT ON FILE, indicates that the encounter record received contained a unique registration code that did not match an existing registration record.

The NDW retains the rejected encounter record, pending receipt of a valid matching registration record, included in a subsequent data export file from the same sending site (ASUFAC).

Using the last ten characters of the **Encounter Code** or **Registration Code** (which approximate the IEN or source system unique ID) of the rejected encounter, the sending site should be able to make corrections, and then resubmit the corrected data in a subsequent data export file. If unfamiliar with the correction process, contact your Site/Area support staff for assistance.

If on subsequent file submissions the missing registration records are loaded into the NDW database, the rejected Encounter records would match with an existing Registration record, and the **Encounter Curr Rej** count for Export ID 10113 would go down to reflect the corrections.

If You Have Questions

If you have any questions or comments regarding NDW Export Tracking, please contact the NPIRS Help Desk at the following e-mail address:

[IHS - OITHELP-NPIRS \(IHS\)](mailto:IHS - OITHELP-NPIRS (IHS))